

## **REMARKS**

### **Claim Rejections**

Claims 1, 10, and 15-16 are rejected under 35 U.S.C. § 102(b) as being anticipated by Masuda (US 6,005,180). Claims 2-3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda in view of Kiuchi et al. (US 6,668,266). Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda in view of Ise et al. (US 4,745,392). Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda in view of Kakihara (US 6,314,024). Claims 6-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda in view of Mozer et al. (US 6,832,194). Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda in view of Smith (US 5,701,511). Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda in view of Wei et al. (US 6,683,817). Claims 11-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda in view of Applicant's Admitted Prior Art.

### **Drawings**

It is noted that the Examiner previously accepted the drawings as originally filed with this application.

### **New Claims**

By this Amendment, Applicant has amended claim 1 of this application. It is believed that the amended claims specifically set forth each element of Applicant's invention in full compliance with 35 U.S.C. § 112, and define subject matter that is patentably distinguishable over the cited prior art, taken individually or in combination.

Applicant does not acquiesce in the correctness of the rejections and reserves the right to present specific arguments regarding any rejected claims not specifically addressed. Further, Applicant reserves the right to pursue the full scope of the subject matter of the claims in a subsequent patent application that claims priority to the instant application.

35 U.S.C. §102(b) Rejection Based on Masuda

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Masuda. Applicant traverses the rejection of claim 1 because Applicant submits that Masuda fails to teach or suggest each of the claim limitations.

In Response to Applicant's arguments on page 7, paragraph 13, the Examiner stated:

Nothing in the claims or specification limits the definition of built-in to meaning on the same chip or piece of silicon.

In response to the Examiner's discussion, Applicant has amended the pertinent part of claim 1 to read:

a non-volatile program memory for storing a startup program wherein the non-volatile program memory and the CPU are *on-chip built-in within the same microprocessor package*.  
(Emphasis added)

The amendment is supported by Figs. 2, 3, and 4 of the present Application, which depict that the non-volatile program memory (51) and the CPU (30) are on-chip built-in within the same microprocessor package (20). In contrast, Masuda discloses in its FIG. 1 an ROM (2) which in fact is *external* to CPU (1) and therefore is *not built-in* within the same package with CPU (1).

The arguments presented in Applicant's prior response is incorporated herein. Specifically, the claimed feature together with the ensuing benefit differentiate the claimed invention from Masuda. In the present invention, the encountered problem is the high cost of an external non-volatile program memory for storing an application program and the low system efficiency if the external non-volatile program memory is omitted and the application program is to be accordingly stored in a permanent memory. The specification of the present invention states, page 2, lines 24 through page 3, line 6:

In . . . the prior art, the microprocessor needs an external non-volatile program memory to store the specific application program. . . . The unit cost (dollars/byte) of the [external] non-volatile program memory is higher than the

permanent memory. . . . If the application program is stored in the permanent memory, the time of the CPU to access the permanent memory will be longer than to access the non-volatile program memory, and the system efficiency is reduced a lot. . . . Therefore, a method is necessary for saving the cost of the non-volatile program memory and not reducing the system efficiency at the same time.

The specification of the present invention also states, page 3, lines 8-11:

The objective of the present invention is to provide a data processing system, in which the microprocessor *doesn't need an external non-volatile program memory* in order to save the cost of the external non-volatile program memory and not reduce the system efficiency. (Emphasis added).

The present invention uses the permanent memory to store the application program and, thus, omits the external non-volatile program memory popularly employed in prior arts to save the cost. As to mitigate the potential side effect of the accompanying reduction of system efficiency, the present invention provides a solution that a non-volatile program memory and the CPU are on-chip built-in within the same microprocessor package. In this configuration, the cost of a large external non-volatile program memory is saved while the system efficiency is not jeopardized (see page 7, lines 19-24).

In contrast, due to its external nature, Masuda's ROM does not have the benefit of quick speed of data access with the CPU as associated with claim 1 of the present invention.

It is axiomatic in U.S. patent law that, in order for a reference to anticipate a claimed structure, it must clearly disclose each and every feature of the claimed structure. Applicant submits that it is abundantly clear, as discussed above, that Masuda does not disclose each and every feature of Applicant's new claims and, therefore, could not possibly anticipate these claims under 35 U.S.C. § 102. Absent a specific showing of these features, Masuda cannot be said to anticipate any of Applicant's new claims under 35 U.S.C. § 102.

Accordingly, Applicant respectfully requests the withdrawal of the 102 rejection.

35 U.S.C. §103(a) Rejections of Dependent Claims

Applicant submits that the dependent claims 2-16 not specifically addressed herein are allowable for the reasons discussed above.

Neither Masuda, Kiuchi et al., Ise et al., Kakiyama, Mozer et al., Smith, Wei et al., nor Applicant's Admitted Prior Art disclose, or suggest a modification of their specifically disclosed structures that would lead one having ordinary skill in the art to arrive at Applicant's claimed structure. Applicant hereby respectfully submits that no combination of the cited prior art renders obvious the amended claims.

Applicant respectfully submits that the arguments presented herein successfully traverse the 35 U.S.C. §102(b)/ §103 (a) rejections of claims 1-16. Allowance of claims 1-16 is therefore requested.

Summary

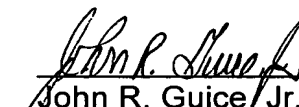
In view of the foregoing, Applicant submits that this application is now in condition for allowance and such action is respectfully requested. Should the Examiner not be of the opinion that this case is in condition for allowance, it is requested that this amendment be entered for the purposes of appeal.

Should any points remain in issue, which the Examiner feels could best be resolved by either a personal or a telephone interview, it is urged that Applicant's local attorney be contacted at the exchange listed below.

Respectfully submitted,

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